

REMARKS

This letter is in response to the office action dated October 14, 2008.

Claims 1-3, 6-26, and 29-50 remain pending in the application. Claims 1, 24 and 50 are independent.

Claim Rejections – 35 USC 101

Applicants thank the Examiner for proposing suitable amendments to overcome the rejections under this section. Claim 24 has been amended to recite a web service accelerator comprising a processor, as suggested by the Examiner. Claims dependent on claim 24 have been similarly amended. Claim 50 has been amended to recite a storage media generally along the lines suggested by the Examiner.

Claim Rejections – 35 USC 103

Claims 1-3, 6-26 and 29-50 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2005/0044197 ("Lai") in view of U.S. Patent Application Publication No. 2004/0148334 ("Arellano"). Applicants respectfully traverse all rejections.

As a preliminary manner, the Applicants appreciate that the Examiner is not bound by the decisions of patent offices in foreign jurisdictions. However, should it be of interest to the Examiner, the Applicants respectfully note that Applicants' corresponding European application has now issued to patent as European Patent No. 1 569 136, with comparable claims.

At pages 6 and 8 of the office action, the Examiner concedes that Lai does not explicitly disclose a first web service description file and creating (from the first web service description file) a second web service description file comprising an optimized web service description. The Applicants agree with this observation of Lai.

However, on page 8 of the office action, it appears that the Examiner is of the view that Arellano discloses these features. The Applicants respectfully disagree for the reasons that follow.

The teachings of Lai

Lai does not disclose the creation of an accelerator output file that comprises a second web service description, as required by the Applicants' claims. The Applicants' independent claims require that this accelerator output file be created by optimizing the web service description of the first web service description file for the mobile device. Since Lai does not disclose creating this accelerator output file (as acknowledged by the Examiner), it follows that Lai also cannot disclose optimizing the web service description of the first web service description file to create the accelerator output file. The Applicants' independent claims also require that the act of optimizing specifically comprise resolving symbolic references in the web service description of the first web service description file, in the particular manner defined in the claims, namely, by performing the as-claimed representing, re-ordering, and creating acts to produce the accelerator output file. Since Lai does not disclose creating the accelerator output file, **it follows that Lai must also fail to disclose performing the specific claimed representing, re-ordering, and creating acts performed in the resolving of symbolic references**, in the optimization performed to create the accelerator output file.

The teachings of Arellano

Likewise, it is respectfully submitted that Arellano also fails to disclose performing the specific claimed **representing, re-ordering, and creating acts performed in the resolving of symbolic references**. The Examiner notes that in Arellano, an improved web service is provided that aggregates a given web service with another based on dynamically coordinated execution of the given web service. Even if the Examiner were to broadly construe Applicants' claimed act of "optimizing a web service description" to include the aggregation process disclosed in Arellano, it is clear that Arellano performs its "optimization" in a different way. Arellano's "optimization" involves comparing the ontological descriptors of various services (see e.g. [0063]), namely rules and text for example (see e.g. [0047]-[0049]). No mention is made of optimizing by way of resolving symbolic references, as required by the Applicants' claims. Further, even if the Examiner were to take the position that "symbolic references" were analogous to Arellano's "ontological descriptors", there are no acts performed in Arellano on the ontological descriptors that could be considered analogous to the specific representing, re-ordering, and creating acts performed in the Applicants' resolving of symbolic references, required by the Applicants' independent claims.

Accordingly, none of the relied-upon references teach or suggest performing the specific claimed representing, re-ordering, and creating acts performed in the Applicants' act of resolving symbolic references.

The Applicants' claims are directed to a specific technique, applied to a specific problem

As noted in paragraph [0058] of the Applicants' description, a standard WSDL file may have many **symbolic references** that require holding the entire file in a memory in order to parse the file. The ordinary skilled person with

knowledge of programming will appreciate that, where the amount of memory is not in issue, symbolic references in a file can generally be resolved rather efficiently in known manner.

However, the Applicants realized that in certain applications, such as where parsing may occur on a mobile device having limited memory and processing power relative to other computing devices, it may be desirable to create a new file (i.e. the optimized file) where the symbolic references are already resolved so that the file is parseable in one pass. Further, the Applicants' claims are generally directed to a specific way of doing this.

Put another way, the Applicants' claimed embodiments deal specifically with WSDL files that contain these problematic symbolic references, and the issues associated with processing them on mobile devices. The authors of the relied-upon documents did not consider these issues. In any event, the Applicants' claimed embodiments do not preempt all techniques of resolving symbolic references in WSDL files; instead, the Applicants' claims relate to a **very specific** technique of resolving these references, requiring in particular:

*representing web service description elements as nodes in a graph,
re-ordering the nodes into a tree data structure so that the symbolic
references are resolved in a forward direction, and
creating the accelerator output file from the tree data structure.*

This represents a particular technique that involves the manipulation of web service description elements modeled as graphical elements, which is not taught in the relied-upon documents.

Furthermore, although the relied-upon documents might suggest techniques for "optimizing" web service descriptions, the Applicants' claimed

embodiments also do not preempt all techniques for optimizing web service descriptions. Lai clearly and explicitly teaches "optimizing" using multiple engines (see [0588]). Therefore, the "optimizing" in Lai is achieved by increasing processing capability. Arellano arguably teaches "optimizing" by comparing ontological descriptors (e.g. rules and text terms, see [0047]-[0049]) of WSDL files as noted above. The "optimizing" in Lai is achieved by looking at e.g. two web service descriptions as input, and determining from a comparison of their ontologies whether e.g. the two services might be combined into a third service. The ordinary skilled person would clearly appreciate that these approaches are entirely different from Applicants' optimizing technique, specifically requiring the resolving of symbolic references by performing the particular representing, re-ordering and creating acts recited in the independent claims. The approaches of Lai and Arellano would not be pre-empted by the Applicants' claims.

Finally, at page 16 of the office action, the Examiner appears to suggest that Lai may disclose the claimed representing, re-ordering and creating acts. However, in view of the foregoing clarifications, it should be clear that Lai cannot disclose these acts. At best, paragraph [0030] of Lai suggests that an XML document may be represented as a tree structure. However, Lai does not contemplate that the nodes in that tree structure should be re-ordered for any purpose. In fact, Lai concedes that the known DOM model requires in-memory processing that is resource-hungry, as recognized by the Applicants at paragraph [0058] of the application as filed and as noted above. Thus, the known tree-based parsing method identified in Lai, in fact, teaches away from the Applicants' claimed embodiments.

Conclusion


For at least the foregoing reasons, it is respectfully submitted that the subject matter of independent claims 1, 24 and 50 is not obvious in view of the

documents cited by the Examiner, taken alone or in combination. It is further submitted that the subject matter of the dependent claims is also not obvious for at least the same reasons.¹ Withdrawal of the rejections under 35 U.S.C. 103 is requested.

The Applicants respectfully remind the Examiner that, even after *KSR*², the following legal principles are still valid, having been endorsed by the Supreme Court or having been unaffected by its decision: (1) the USPTO still has the burden of proof on the issue of obviousness; (2) the USPTO must base its decision upon evidence, and it must support its decision with articulated reasoning (slip op. at 14); (3) merely demonstrating that all elements of the claimed invention exist in the prior art is not sufficient to support a determination of obviousness (slip op. at 14-15); (4) hindsight has no place in an obviousness analysis (slip op. at 17); and (5) Applicants are entitled to a careful, thorough, professional examination of the claims (slip op. at 7, 23, in which the Supreme Court remarked that a poor examination reflected poorly upon the USPTO).

It is submitted that each of claims **1-3, 6-26, and 29-50** is now in form for allowance, and a notice to that effect is respectfully requested.

Respectfully submitted,
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¹ As the Examiner appreciates, if an independent claim is non-obvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious, e.g., *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

² *KSR International Co. v. Teleflex, Inc.*, No. 04-1350 (April 30, 2007)